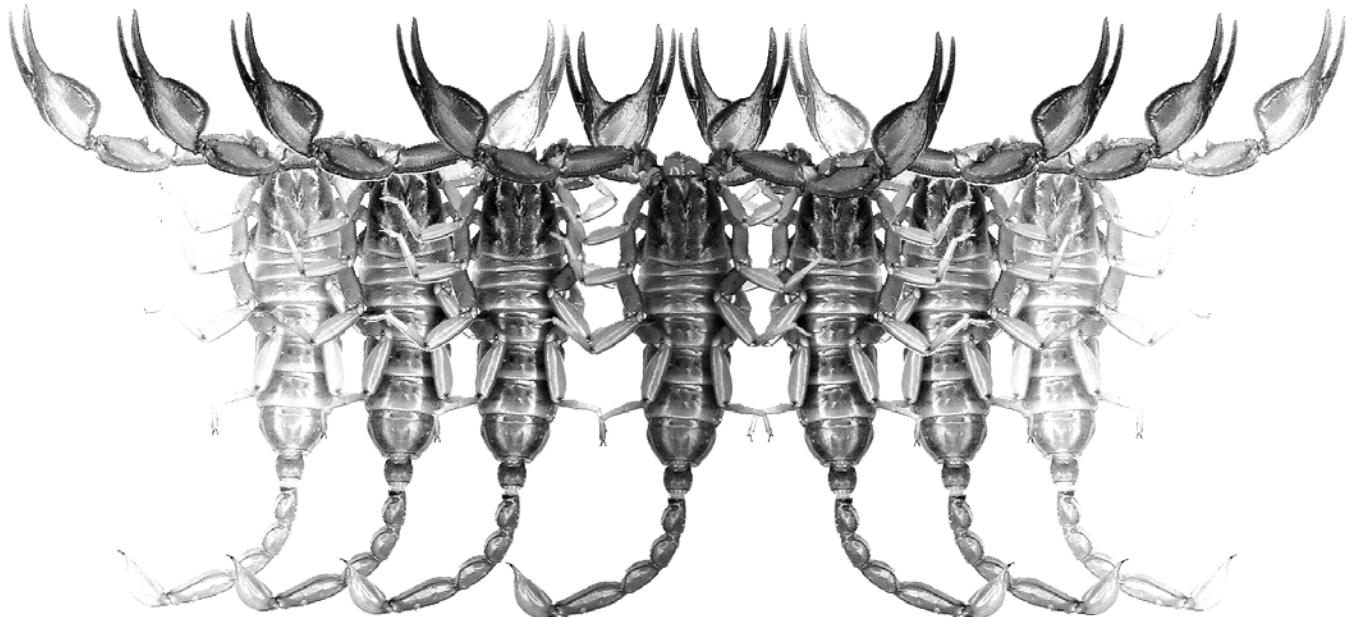


Euscorpius

Occasional Publications in Scorpiology



New Localities of *Iurus dufourei* *dufourei* (Brullé, 1832)
in the Peloponnese, Greece (Scorpiones: Iuridae)

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February 2007 – No. 52

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Occasional Publications in Scorpiology

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- **BMNH**, British Museum of Natural History, London, England, UK
- **MZUC**, Museo Zoologico “La Specola” dell’Universita de Firenze, Florence, Italy
- **ZISP**, Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia
- **WAM**, Western Australian Museum, Perth, Australia
- **NTNU**, Norwegian University of Science and Technology, Trondheim, Norway

New localities of *Iurus dufoureius dufoureius* (Brullé, 1832) in the Peloponnese, Greece (Scorpiones: Iuridae)

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Summary

New localities of *Iurus dufoureius dufoureius* (Brullé, 1832) are listed, found during a recent survey in the districts of Achaia, Messinia, and Arcadia in the Peloponnese, Greece. Notes on the habitat and a map are provided.

Introduction

The scorpion genus *Iurus* Thorell is known from southwestern Turkey and southern Greece. In Greece, it is found on the islands of the south Aegean Arch and in the southwestern Peloponnese (Werner, 1902, 1937; Penther, 1906; Vachon, 1948; Kinzelbach, 1975; Francke, 1981; Kritscher, 1993; Crucitti 1995a, 1995b, 1998, 1999a, 1999b; Stathi, 1998; Stathi & Mylonas, 2001; Fet & Braunwalder, 2000; Sissom & Fet, 2000; Parmakelis et al., 2006).

Two subspecies of *Iurus dufoureius* (Brullé, 1832) have been described. The nominal subspecies is known from the Peloponnese, Kythira, Gavdos, and Crete. On the other hand, *I. dufoureius asiaticus* Birula, 1903 is found in Turkey and the neighboring southern Aegean islands of Karpathos, Kos, Leros, Rodos, Samos, and Megisti (Kastelorizo) (Kinzelbach, 1975; Parmakelis et al., 2006).

The systematics of this genus is still unclear. Most authors who studied it consider *Iurus* a monotypic genus with two subspecies (Kinzelbach, 1975; Kritscher, 1993; Parmakelis et al., 2006) while others distinguished two species (Francke, 1981; Vachon & Kinzelbach, 1987). The DNA data of Parmakelis et al. (2006) seem to confirm the existence of two distinct species (Victor Fet, pers. comm.).

Materials and Methods

The observations were conducted 1–9 August 2005 under stones during the daytime, and with the aid of a UV torch at night. One adult specimen (♀), found near the village of Kato Zachlorou (K. Ζαχλωρού), was

collected and is preserved in 75% alcohol at Museo Civico di Scienze Naturali “E.Caffi”, Bergamo, Italy.

New Localities of *I. dufoureius*:

(1) Vorio (Βόρειο), Fig.1, locality 1, 600 m a.s.l., 36°57'30"N, 22°14'19"E on the western slopes of Taygetus: 3 specimens found during the day, under stones in an environment with little surface water;

(2) Artemisia (Αρτεμισία), about 7 km on the road to Kalamata (Καλαμάτα), Fig.1, locality 2, 400 m a.s.l. The locality is in an upper vegetation belt featuring low and sparse vegetation on the roadside embankment and no surface water. On the contrary, near the Nedontas (Νέδωνας) river (a few dozen metres further down) the vegetation is lush in a humid environment. On-the-spot inspections were made both in daytime and at night over the entire area. Only one specimen was found in the upper belt during the night hours, whereas several were seen at the river both in daytime and at night.

(3) Karitena, Kalamou Monastery (Μ. Καλαμίου), Fig.1, locality 3, 550 m a.s.l., 37°28'52"N, 22°02'25"E. Several specimens found at night on rocks in a humid and shady area.

(4) Kakoureika (Κακουράϊκα), Fig.1, locality 4, 280 m a.s.l., 37°34'46"N, 21°55'14"E. One specimen seen at night on large rock outcrops next to a small stream, 3 km NW of the village near a small church.

(5) Kato Zachlorou (Κ. Ζαχλωρού), Fig.1, locality 5, the Vouraikos (Βουραϊκόν) River gorge, 700 m a.s.l., 38°05'27"N, 22°09'11"E. The rocky substrate outcrop in the area of the finding consists of Pleistocene sediments characterised by conglomerate deposits and alluvial boulders in clastic rocks. Overall the rocky mass appears more or less fractured due to the neotectonic

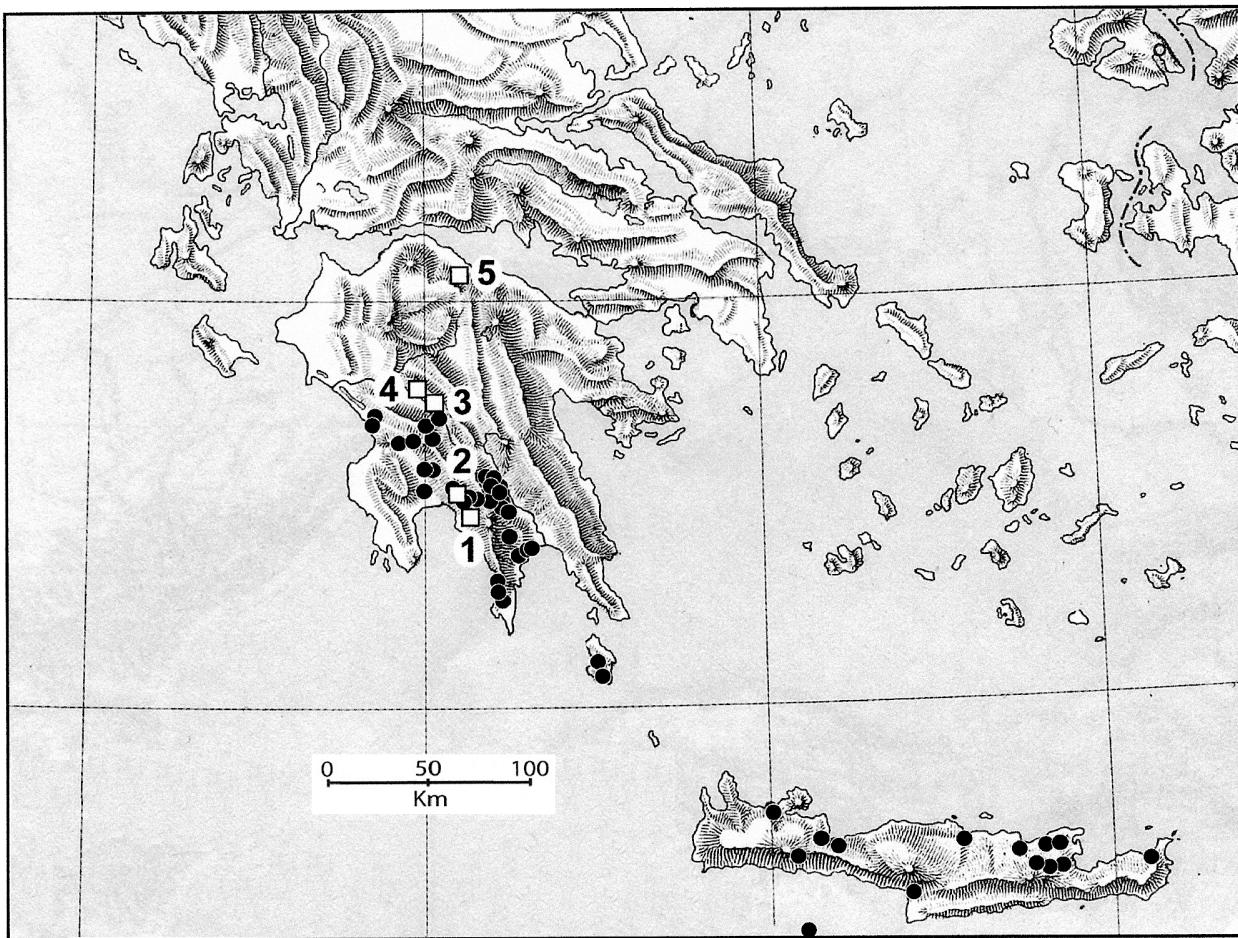


Figure 1: Distribution of *Iurus dufoureius dufoureius*. White squares, new localities; black circles, localities known from literature.

activity which has lifted the entire area. The sub-vertical valley outline has a typically young morphology produced by the great erosion of the slopes. The specimen was collected during the night near a small spring on the unpaved road 1–2 km from the village.

Description of a Specimen

The single collected female specimen from Kato Zachlorou shows all the characteristics of the nominal subspecies. The body is brown with slightly darker pedipalps and paler legs and vesicle, brown chelicerae which become paler apically without any reticulation. The sternum shape, cheliceral dentition, as well as the distribution and number of trichobothria on the pedipalps correspond with the description given by Francke & Soleglad (1981). Pectinal teeth: 9–9.

Measurements (mm). Total length, 66.0. Carapace length, 9.0; front width, 4.0; rear width, 8.5; distance between rear margin and median eyes, 5.2. Metasomal

segments: segment I length, 4.0; width, 4.1; height 3.4; segment II length, 4.6; width 3.4, height 3.0; segment III length, 4.8; width 3.2, height 3.3; segment IV length, 5.3; width 2.9, height 3.0; segment V length, 9.0; width 2.9, height, 2.7; vesicle (with aculeus) length, 10.0; width 2.8, height 2.4. Pedipalps: femur length, 8.5; width 3.2, height 2.5; patella length, 8.4; width 3.6, height 3.2; chela length, 17.3; width 4.0, height 3.5.

Conclusions

The new data expand the geographic range of *Iurus dufoureius dufoureius*, which was found for the first time in the northern Peloponnese, Greece. The new locality is more than 60 km away from the previously indicated localities. This survey shows that although *Iurus dufoureius* prefers humid and protected places, it can also be found at night with the aid of a UV lamp in open spaces, where solar radiation is strong and direct during the daytime.

Acknowledgments

I would like to thank my mother, Maria Elena, for her precious help during the trip to Greece, as well as Marco Valle, Paolo Pantini, Federico Confortini, and Omar Lodovici of the Museo Civico di Scienze Naturali “E.Caffi” in Bergamo for their essential help in compiling and reviewing this note. I am grateful to Victor Fet and two anonymous reviewers for their comments and suggestions.

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